

Contributions to the Ornithology of New Guinea. By R. BOWDLER SHARPE, F.L.S.—Part IX. On further Collections made by Mr. A. Goldie in the Astrolabe Mountains.

[Read 17th April, 1884.]

IT is now some time ago since Messrs. Salvin and Godman showed me a collection of birds forwarded to them by Mr. Goldie, but pressure of official work at the British Museum during the removal of the zoological collections to Kensington has not allowed me the time to study them until quite recently. A few of the birds have passed into the national collection, and three of these possess more than ordinary interest.

Order ACCIPITRES.

Subfam. BUTEONINÆ.

ERYTHROTRIORCHIS DORLÆ.—Megatriorchis Dorlæ, *Salvad. & D'Albert. Ann. Mus. Civic. Genov.* vii. p. 805 (1875); *Salvad. Orn. Papuasia &c.* i. p. 41 (1880).

Adult. General colour above glossy black, with nearly obsolete rufous margins to the feathers of the upper surface; wing-coverts black, very plainly and broadly edged with chestnut; bastard-wing and primary-coverts black, with indistinct bars of ashy brown, nearly obsolete on the bastard-wing; quills black, barred across with brown, these bars less distinct on the inner webs; tail-feathers black, barred with ashy grey, about twelve bars being discernible on the central feathers; the outer tail-feathers with about the same number of brown bars, as well as one at the tip; crown of head uniform black, the nape crested; feathers below the eye and the ear-coverts black, the feathers edged with rufous buff, imparting a streaked appearance; cheeks and throat rufescent buff, streaked with black down the centre of the feather; remainder of under surface white, streaked broadly with black, and marked slightly with chestnut, especially on the sides of the body; the black bars rather broken up, and in the form of large spots on the flanks, abdomen, and under tail-coverts; thighs broadly barred with black and white, with a chestnut spot in the centre of the black bars; under wing-coverts black in the centre, rufous or rufous-white on the edges; the lower series blackish, barred with ashy or greyish white like the lower surface of the

quills. Total length 20 inches, culmen 1·05, wing 12·8, tail 10·0, tarsus 3·1.

After carefully examining this curiously marked Hawk, I came to the conclusion that it must be *Megatriorchis Doriæ* of Salvadori and D'Albertis; and on applying to my friend Marquis Doria, he very kindly sent me over the type of the latter bird for comparison. I am confirmed in my opinion that in the bird described above we have the first known example of the adult in any collection; and I now give a detailed description of the typical specimen of *M. Doriæ*, which is apparently a young bird.

Young female (type of species). General colour above brown, barred regularly across with lighter brown, the edges of the feathers rather more rufous or fawn-coloured; head brown, streaked with rufous, the feathers edged with this colour, and having creamy white bases; the ear-coverts a broad eyebrow of white feathers streaked with black; a small crest of pointed plumes; nape-plumes white, with a rufous tinge, and mesially streaked with black; hind neck like the back, but more mottled with black spade-shaped terminal spots to the feathers; wing-coverts ashy brown, tipped with fawn-colour, and broadly barred across with darker brown; quills ashy brown, broadly barred across with blackish brown for their entire length, the interspaces on the secondaries lighter, these quills being much paler tipped; upper tail-coverts and tail-feathers ashy brown, tipped with greyish, slightly tinged with rufous on the former, the tail-feathers crossed with twelve bars of blackish brown; sides of face and ear-coverts white, the feathers mesially streaked with dark brown, the ear-coverts tipped with blackish brown, forming a distinct patch; under surface of body creamy white, streaked with dark brown, very narrowly on the throat, broader on the abdomen and lower breast, the thighs and under tail-coverts with nearly obsolete mesial streaks; fore neck and breast broadly streaked with light rufous, browner on the former, the breast-feathers with a shaft-streak of dark brown; under wing-coverts and axillaries white, with a dark brown shaft-streak; quills ashy below, white near the base, barred with dark brown, the bars about nine in number; "bill black, the cere and eyelids ash-colour; feet whitish grey; iris chestnut-brown" (*D'Albertis*). Total length 7·5 inches, culmen 1·7, wing 13·7, tail 12·8, tarsus 3·4. (*Mus. Genuensi*.)

Hab. Monté Epe, S.E. New Guinea.

At the same time it is evident that the genus *Megatriorchis* is not distinct from *Erythrotriorchis*, Sharpe, P. Z. S. 1875, p. 337, and the species will have to stand as *Erythrotriorchis Doriæ*.

Suborder STRIGES.

Fam. BUBONIDÆ.

NINOX THEOMACHA (*Bp.*); *Sharpe, Cat. B. ii. p. 178.*

A specimen sent by Mr. Goldie is undoubtedly *N. Goldiei* of Mr. Gurney, and, I think, is the same as *N. terricolor* of Ramsay. I incline to the belief that both are identical with *N. theomacha* of Bonaparte, although I admit that the very much larger size of *N. Goldiei* and its less uniform under-surface seem at first to separate it from the smaller *N. theomacha*, of which the Museum has an example also from the Astrolabe Mountains. The latter is a male, and the specimen of *N. Goldiei* is a female, so that, until contrary evidence is adduced, I shall consider *N. theomacha* is the male and *N. Goldiei* the female of the same species; although I admit that the difference in size of the sexes is rather more than is usual in the genus *Ninox*. I append a full description of the adult female (= *N. Goldiei*).

Adult. General colour above nearly uniform sooty brown, with a chocolate tinge on the mantle and scapulars, the latter of which have a few scattered white or reddish-white spots on the outer web; wing-coverts uniform and like the back, the median and greater coverts alone having some spots of white here and there on the outer web, the greater series somewhat tinged with chocolate-brown; bastard-wing, primary-coverts, and quills blackish brown or dark sepia, the quills rather browner externally, and barred indistinctly with greyish or ashy brown, the innermost secondaries with a few scattered white spots on the outer web; tail uniform sooty brown, with a few lighter bars towards the base of the inner web of the central feathers; head uniform sooty or dark ashy brown, more inclining to chocolate brown on the forehead; lores greyish white, with dusky shaft-lines extending above the fore part of the eye; cheeks and ear-coverts uniform dark ashy brown; throat ashy fulvous, with dusky centres to the feathers; sides of breast and fore neck uniform warm chocolate-brown; the remainder of the under-surface chocolate-brown, plentifully mottled all over the breast, abdomen, and flanks with large white spots and dusky cross

bars, the spots rounder on the breast, and squarer and larger on the flanks; thighs tawny, mottled with chocolate-brown centres to the feathers; under tail-coverts pale tawny buff, mottled like the breast with brown bars and large rounded white spots; under wing-coverts dark chocolate-brown, the inner ones and axillaries pale rufous on their edges; greater under wing-coverts blackish below, with broad bars of white on the inner web; quills blackish below, with obsolete paler bars on the inner web, rather plainer near the base, the first primary hoary white near the base of the outer web, and notched with hoary white for the greater part of the latter. Total length 12 inches, culmen 0·75, wing 8·7, tail 5·0, tarsus 1·25.

Fam. PARADISIIDÆ.

Genus AMBLYORNIS.

AMBLYORNIS SUBALARIS, sp. n.

Differs from *A. inornatus* in being more dingy in colour below, being dusky brown, with fulvous centres and narrow fulvous shaft-lines; under wing-coverts and inner lining of quills rich ferruginous, instead of orange-buff. Total length 8 inches, culmen 0·9, wing 4·65, tail 3·4, tarsus 1·4.

On the Anatomy and Functions of the Tongue of the Honey-Bee (Worker). By TRAVERS JAMES BRIANT. (Communicated by B. DAYDON JACKSON, Sec.L.S.)

[Read 3rd April, 1884.]

(PLATES XVIII. & XIX.)

IN order to arrive at a just appreciation of the relationship of the tongue of the Bee to the rest of the head, it will be necessary to refer to the more conspicuous parts of the endo-skeleton to which it is related.

From the lower half of the ring which surrounds the occipital foramen arise two pillars (*a*, fig. 1, longitudinal section of head, without muscles; fig. 2, horizontal section, with muscles), which pass obliquely downwards to the front wall of the head, and there